

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker Governor

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> Martin Suuberg Commissioner

February 1, 2016

Mr. Michael Eriksen The Gillette Company 30 Burtt Road Andover, MA 01810 **RE: ANDOVER**

Transmittal No.: X267394 Application No.: NE-15-009

Class: *SM79-7* FMF No.: 130128

AIR QUALITY PLAN APPROVAL

Dear Mr. Eriksen:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Waste Prevention, has reviewed your Non-major Comprehensive Plan Application ("Application") listed above. This Application concerns the proposed removal of an air pollution control device and the implementation of lower federally enforceable emission limits at your manufacturing facility located at 30 Burtt Road in Andover, Massachusetts ("Facility"). The Application bears the seal and signature of Mr. Paul Murphy, Massachusetts Registered Professional Engineer Number 41840.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control" regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-N, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

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1. DESCRIPTION OF FACILITY AND APPLICATION

The Gillette Company-Andover Manufacturing Center (AMC) is located at 30 Burtt Road in Andover, MA. AMC currently possesses an Operating Permit, MBR-95-OPP-041RMAA, because the Facility has a potential to emit of 150 tons per year of volatile organic compounds (VOC) as a manufacturer of shaving products, aerosol deodorants, antiperspirants and hair care products. AMC is not and has never been a major source for hazardous air pollutants (HAPs). Emission Unit No. 5 (EU5) and Emission Unit No. 22 (EU22) were the only manufacturing lines that were controlled by the existing regenerative thermal oxidizer (RTO). EU5 is an existing shave cream and shave gel manufacturing line. The production of shave cream utilizes a small amount of VOC as a propellant while shaving gel utilizes compressed air (no VOC emissions). EU22 is a production line that produced deodorant, anti-perspirant, and hair spray.

In 2013, the RTO controlled VOC emissions from the production of approximately 23 million shaving cream cans on EU5 and approximately 40 million hair care cans on EU22. In November 2014, AMC became a "shave only" site which led to the removal of EU22 from the Facility. Within the past few years, AMC has also removed nine (9) other emission units from the Facility. With the reduction in operating capacity due to the removal of emission units from the Facility plus the reduced production of VOC-containing products, AMC has been able to reduce VOC emissions to a level below the major source threshold of 50 tons of VOC per year. As such, AMC submitted its Non-Major Comprehensive Plan Application to restrict its facility-wide emission limit for VOC below MassDEP's Air Quality major source threshold of 50 tons per year and to request the consolidation of all existing plan approvals for the Facility in be incorporated within this Approval. Once AMC has fulfilled their obligations for their Operating Permit, AMC shall submit a request to MassDEP to terminate the Operating Permit and will no longer be classified as a major VOC emitting source.

AMC submitted a Best Available Control Technology (BACT) analysis for the existing shave cream and shave gel manufacturing line (EU5). The BACT analysis concludes that VOC controls are not necessary and that EU5 shall be restricted to a VOC emission limit of 9.9 tons per rolling twelve month rolling period (which is representative of VOC BACT for this process line).

AMC now manufactures shaving products exclusively, including shaving cream and shaving gel. The Facility consists of three (3) aerosol can filling lines and a tank farm. The tank farm includes three (3) propellant tanks (A46, Blowing Agent, and one spare tank).

In addition, the Facility operates four (4) stationary reciprocating internal combustion engines (RICE) that may be subject to the Federal National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines (RICE) under 40 CFR Part 63 Subpart ZZZZ. This regulation includes stationary RICE units at an area source. Since MassDEP has not accepted delegation for Subpart ZZZZ, you are advised to consult with the United States Environmental Protection Agency (USEPA) for additional information. There

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may be additional notification, record keeping, and reporting requirements. Their address is US EPA Region 1, 5 Post Office Square – Suite 100, Boston, MA 02109-3912.

The Facility also operates two (2) 29.291 MMBTU/hr natural gas-fired boilers. These boilers are only capable of burning natural gas.

Besides EU5, four (4) RICE engines, and two (2) natural gas-fired boilers, the remaining facility consists of: an existing shave gel only manufacturing line which has noVOC emissions, a pilot lab for testing propellants and concentrates, three (3) above ground storage tanks for propellant, an existing aerosol can filling line, and the facility date coding operations (which prints a date on the finished product manufactured at the facility).

2. <u>EMISSION UNIT IDENTIFICATION</u>

Each Emission Unit ("EU") identified in Table 1 is subject to and regulated by this Plan Approval:

	Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)	
EU1	Cleaver Brooks Boiler # CB 665-700	29.291 million British thermal units per hour (MMBtu/hr)	None	
EU3	Cleaver Brooks Boiler # CB 665-700	29.291 MMBtu/hr	None	
EU5	Line #1 manufactures shave cream and shave gel.	Maximum filling of 300 cans per minute of shave cream	None	
EU7	Line #4 only manufactures shave gels. Since there are no longer any VOC emissions to control, the process air from this line is now vented directly to ambient.	Maximum filling of 300 cans per minute of shave gel	None	

	Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)	
EU10	Pilot Lab (LPFM)	95 gallons propellant per hour 116 gallons concentrate per hour	None	
	Tank Farm Propellant Tank (Tank No. V-102) above ground tank holding A-46 propellant	25,000 gallons (V-102)	None	
EU12	Tank Farm Propellant Tank (Tank No. V-103) above ground tank holding Blowing Agent	25,000 gallons (V-103)	None	
	Tank Farm Propellant Tank (Tank No. V-104) above ground tank (spare)	30,000 gallons (V-104)		
EU13	Cummins H6-1F Diesel (CI RICE) Fire Pump No. 3	4 gallons of fuel oil per hour (< 3 MMBtu/hr)	None	
EU14	Cummins NH-220 Diesel (CI RICE) Fire Pump No.2	4 gallons of fuel oil per hour (< 3 MMBtu/hr)	None	
EU17	Aerosol Can Filling Line No. 5	150 units per minute	None	
EU19	Date Coding	409,968,000 units per year	None	
EU23	Gas Room and Critical Power Propane (SI RICE) Emergency Generator Kohler 30RZGB	30 kW output	None	
EU24	LMR Sump and Emergency Power Propane (SI RICE) Emergency Generator Kohler 30RZGB	30 kW output	None	
EU25	Miscellaneous Gas Room venting, changeovers, evacuations and head repairs, (from EU5, EU7 and EU17).	N/A - activity performed as per maintenance and production schedule	None	

	Table 1			
EU# Description Design Capacity		Pollution Control Device (PCD)		
EU26	Cleaning / Sanitizing alcohol usage (70% ethanol)	70% ethanol used for microbial control on equipment from hand wiping operations, (spray/squirt bottles, etc.)	None	

Table 1 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

MMBtu/hr = million British thermal units per hour

kW = kilowatts

CI RICE = compression ignition reciprocating internal combustion engine

SI RICE = spark ignition reciprocating internal combustion engine

LPFM = Laboratory Propellant Filling Module

LMR = Liquid Mix Room

N/A = not applicable

3. <u>APPLICABLE REQUIREMENTS</u>

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

Table 2					
EU#	Allowable fuel or Raw Material	Restrictions	Pollutant	Emission Limit/Standard	
EU1	Notural Cas		SO_2	\leq 0.02 ton per month \leq 0.2 ton per rolling 12 month period	
EU3	Natural Gas	3 Natural Gas N/A NO _x	N/A	NO_x	\leq 2.2 tons per month \leq 25.7 tons per rolling 12 month period

	Table 2			
EU#	Allowable fuel or Raw Material	Restrictions	Pollutant	Emission Limit/Standard
			PM	0.15 pound/MMBtu
EU5	VOC-containing propellant	Uncontrolled emissions from manufacturing shave care products	VOC	≤ 2 tons per month ≤ 9.9 tons per rolling twelve month period
EU10	VOC-containing propellant & concentrate	N/A	VOC	≤ 0.5 tons per month ≤ 2.0 tons per rolling twelve month period
EU12	VOC-containing propellant	Restricted to miscellaneous bulk tanker hose disconnects during deliveries and tank evacuations & venting for periodic tank maintenance and inspections	VOC	≤ 2.0 tons per month ≤ 4.0 tons per rolling twelve month period
EU13 EU14	No. 2 fuel oil ≤0.0015% Sulfur by weight	≤ 167 gallons per month, combined ≤ 2000 gallons per rolling twelve month period, combined	Sulfur in fuel	≤ 15 ppm
EU17	VOC-containing propellant	N/A	VOC	≤ 1 ton per month ≤ 4.0 tons per rolling twelve month period
EU19	VOC-containing inks	N/A	VOC	≤ 1 ton per month ≤ 3 tons per rolling twelve month period

	Table 2			
EU#	Allowable fuel or Raw Material	Restrictions	Pollutant	Emission Limit/Standard
EU25	VOC-containing propellant	N/A	VOC	\leq 1.0 ton per month \leq 4.0 tons per rolling twelve month period
EU26	VOC-containing alcohol solution	N/A	VOC	≤ 1.0 ton per month ≤ 3.0 tons per rolling twelve month period
			VOC	≤ 10.5 tons per month ≤ 33.0 tons per rolling 12 month period
	N/A	N/A	Any single HAP	≤ 4.9 tons per month ≤ 7.5 tons per rolling 12 month period
			Total HAP	≤ 9.0 tons per month ≤ 19.5 tons per rolling 12 month period
Facility- Wide ^a			SO ₂	≤ 0.06 ton per month ≤ 0.6 ton per rolling 12 month period
			NO _x	≤ 2.3 tons per month ≤ 27.5 tons per rolling 12 month period
			СО	≤ 1.9 tons per month ≤ 22.0 tons per rolling 12 month period
			Smoke	< No. 1 of Chart b, except No. 1 to < No. 2 of Chart for \leq six (6) minutes during any one hour

	Table 2			
EU#	Allowable fuel or Raw Material	Restrictions	Pollutant	Emission Limit/Standard
			Opacity	≤ 20 percent except 20 to ≤ 40 percent for ≤ two (2) minutes during any one hour

Table 2 Key:

EU# = Emission Unit Number	$NO_x = Nitrogen Oxides$
CO = Carbon Monoxide	$SO_2 = Sulfur Dioxide$
PM = Total Particulate Matter	VOC = Volatile Organic Compounds
HAP = Hazardous Air Pollutant	N/A = not applicable
CO_2 = Carbon Dioxide	TPM = tons per month
TPY = tons per consecutive12-month period	MMBtu = Million British Thermal Unit
CMR = Code of Massachusetts Regulations	CFR = Code of Federal Regulations

Table 2 Footnotes:

Facility-wide emission limits include all permitted as well as insignificant activities, exempt sources, and Environmental Results Program (ERP) sources.

Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by the Department.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

Table 3		
EU#	MONITORING/TESTING REQUIREMENTS	
EU1, EU3	1) Monitor natural gas usage for the boilers on a monthly and twelve month rolling period (current month plus the sum of the previous eleven months). Said monitoring shall also include a calculation of the resulting emissions from said usage so that compliance with the record keeping requirements in Table 4, No. 1 of this Plan Approval shall be maintained.	

	Table 3		
EU#	MONITORING/TESTING REQUIREMENTS		
	2) Monitor unit operations to ensure continuous compliance with the particulate matter emission limits contained in Table 2 of this Plan Approval.		
	3) Inspect and maintain any fuel utilization facility, having an energy input capacity of ≥ 3 MMBtu per hour in accordance with manufacturer's recommendations and test for efficient operation at least once in each calendar year as provided in 310 CMR 7.04(4)(a) incorporated herein by reference.		
EU5	4) Monitor monthly records to demonstrate that the VOC and HAP emissions do not exceed the emission levels specified in Table 2 of this Plan Approval. At a minimum, the information shall include a list of the VOC-containing materials and HAP-containing materials used during the month, the VOC content of each material, and the actual emissions of VOC and HAP for the month as well as the prior 11 months.		
EU5, EU7, EU10, EU12, EU17, EU19, EU25, EU26	5) Monitor facility operations such that compliance with the restrictions and emission limitations/standards contained in Table 2 of this Plan Approval can be determined.		
EU5, EU7	6) Monitor that seal-less booster pumps are being utilized. [Approval MBR-92-IND-053, Proviso No. I.6] 7) Monitor operations of its Reduced Pump Pressure Program. Under this program, the Permittee must post next to each filling line the matrix of optimal pump pressures as a function of can size and fill speed (which itself is a function of numerous variables, such as aerosol valve configuration). The Permittee must update its matrices as necessary. Copies of all matrices, including outdated matrices, must be included in the RACT Compliance Files for at least five (5) years and must be available for MassDEP and EPA review. MassDEP and EPA may review the matrices as posted next to the gassing rooms, as well. The Permittee's Changeover Procedures shall be revised to require use of the matrix. This SOP for Changeover Procedures must also be available for MassDEP and EPA review. [Approval MBR-92-IND-053, Proviso No. I. 7]		
EU5, EU7, EU17	8) Monitor gas room safety venting. Specifically, the gas room operator's initials, date, time, reason, location, and approximate amount of VOC that is vented must be documented. Actively used records must be kept by each filling room, and accumulated records must be stored in the RACT Compliance Files for at least five (5) years and made available for MassDEP and EPA review. [Approval MBR-92-IND-053, Proviso No. I. 10] 9) Monitor records of attendance lists of the required semi-annual Gas Room Operator (GRO) Training (formerly known as Hydrocarbon Safety Training). [Approval MBR-92-IND-053, Proviso No. I. 20]		

	Table 3
EU#	MONITORING/TESTING REQUIREMENTS
	10) The Permittee must continue use of its comprehensive Aerosol Filling Room Leak Detection and Repair Program (AFRLDRP). The AFRLDRP must be conducted at least semi-annually on all gassing room pipeline hardware. Monitor the dates that the AFRLDRP are conducted to verify that it is being conducted at least semiannually as required. [Approval MBR-92-IND-053, Proviso No. I.8]
EU12	11) Monitor operations so that new Tank Farm operators are taught the Propellant Tank Farm Emission Minimization Program within the first week of a new Tank Farm operator's hiring/transfer, whenever a new person is assigned to the Tank Farm for a period of longer than one month. [Approval MBR-92-IND-053, Proviso No. I.20]
	12) As part of its Tank Farm Leak Detection and Repair Program (TFLDRP), which includes propellant emission sources, the Permittee must inspect all components of the Tank Farm and outdoor piping on a semi-annual basis. [Approval MBR-92-IND-053, Proviso No. I.9]
EU12	13) The Tank Farm operator shall monitor information about each tank truck delivery, including the date, propellant type and the operator's initials. The Tank Farm operator must monitor emissions from each tank maintenance/inspection activity. [Approval MBR-92-IND-053, Proviso No. I13]
EU13,EU14 EU23, EU24	14) Monitor fuel consumption for the fire pumps and emergency engines on a monthly and twelve month rolling period (current month plus the sum of the previous eleven months). Said monitoring shall also include the sulfur content of the fuel oil used and a calculation of the resulting emissions from said usage.
EU1, EU3, EU13, EU14, EU23, EU24	15) Monitor to ensure that fuel purchase receipts are kept for each unit. 16) Equipment or emissions monitoring systems used for the purposes of documenting compliance with restrictions/emission limits in Table 2 of this Plan Approval shall be calibrated, maintained and operated in sufficient manner to ensure continuous and accurate operation at all times.
EU25	17) Monitor tank farm emissions from miscellaneous tanker truck hose disconnects and from maintenance and inspection activities.
EU26	18) Monitor cleaning alcohol emissions from miscellaneous manual parts cleaning and microbial sanitizations for GMP (Good Manufacturing Practice) purposes.
Facility-Wide	 19) Monitor operations such that the records of the facility-wide VOC, HAP, SO₂, CO, and NO_x emissions on a monthly and 12 month rolling period are maintained so that compliance with the emission limits in Table 2 of this Plan Approval shall be documented. 21) Monitor facility operations for instances of deviation from this Plan Approval. 22) When a new aerosol-packaged product is considered for introduction, the standard testing procedures must include evaluation of the technical feasibility of TTV filling. If technically feasible, the new product must be TTV-filled. [Approval MBR-92-IND-053, Proviso No. I.3]

	Table 3
EU#	MONITORING/TESTING REQUIREMENTS
	23) Monitor alcohol usage on a monthly basis in the RACT Compliance Files for at least five (5) years and be made available for MassDEP and EPA inspection. [Approval MBR-92-IND-053, Proviso No. I.15]
	24) Inspect and maintain each fuel utilization facility, having an energy input capacity of ≥ 3 MMBtu /hr in accordance with manufacturer's recommendations and test for efficient operation at least once in each calendar year as provided in 310 CMR 7.04(4)(a) incorporated herein by reference.
	25) Monitor operations to assure that TTV (through the valve) filling is being used for its entire current shave cream (non-gel) products. The Permittee must also monitor that for any new shave cream (non-gel) products, TTV filling is evaluated for technical feasibility, and used if technically feasible. [Approval MBR-92-IND-053, Proviso No. I.12]
	 26) Monitor the sulfur content of each new shipment of fuel oil received. Compliance with sulfur content shall be demonstrated through testing or maintaining a shipping receipt from the fuel supplier. The shipment certification or testing of sulfur content of fuel oil shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by MassDEP and EPA. 27) Monitor all operations to ensure sufficient information is available to comply
	with 310 CMR 7.12 Source Registration. 28) Monitor facility operations such that VOC are stored and disposed of in a manner that will minimize evaporation to the atmosphere.
Facility-Wide	29) Monitor facility operations such that the records of all monitoring data and supporting information are kept on site for a period of at least five (5) years from the date of the monitoring sample, measurement, or report. Supporting information includes at a minimum, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required, and any other information required to interpret the monitoring data. Records required to be maintained shall include, where applicable:
	a) The date, place as defined in the Permit, and time of sampling or measurements;
	b) the date(s) analyses were performed;
	c) the company or entity that performed the analyses;
	d) the analytical techniques or methods used;
	e) the results of such analyses; and
	f) the operating conditions as existing at the time of sampling or measurement.

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Table 3	
EU#	MONITORING/TESTING REQUIREMENTS
	30) In accordance with 310 CMR 7.71(1), establish and maintain data systems or record keeping practices (e.g. fuel use records, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c. 298, § 6.
	31) If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.
	32) At least 30 days prior to emission testing, the Permittee shall submit to MassDEP for approval a stack emission pretest protocol.
	33) Within 45 days after emission testing, the Permittee shall submit to MassDEP a final stack emission test results report.

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Table 3 Key:

EU# = Emission Unit Number

CO = Carbon Monoxide

PM = Total Particulate Matter

HAP = Hazardous Air Pollutants

 CO_2 = Carbon Dioxide

CMR = Code of Massachusetts Regulations

CFR = Code of Federal Regulations

USEPA = U. S. Environmental Protection Agency

 $NO_x = Nitrogen Oxides$ $SO_2 = Sulfur Dioxide$

VOC = Volatile Organic Compounds

Table 4	
EU#	RECORD KEEPING REQUIREMENTS
EU1, EU3	 Maintain a record of natural gas usage for the boilers on monthly and twelve month rolling period (current month plus the sum of the previous eleven months) so that compliance with the fuel restrictions contained in Table 2 of this Plan Approval shall be documented. Said records shall also a calculation of the resulting emissions from said usage. Record unit parameters, as necessary, to ensure continuous compliance with particulate emission limits.
	3) In accordance with 310 CMR 7.04(4)(a), maintain results of fuel utilization facility inspection, maintenance, and testing and the date upon which it was performed posted conspicuously on or near the facility.
EU5, EU7, EU10, EU12, EU17, EU19, EU25, EU26	4) Maintain adequate monthly records to demonstrate that the VOC and HAP emissions do not exceed the emission levels specified in Table 2 of this Plan Approval. At a minimum, the information shall include a list of the VOC-containing materials and HAP-containing materials used during the month, the VOC content of each material, and the actual emissions of VOC and HAP for the month as well as the prior 11 months. The MassDEP approved On-Site Record Keeping Form can be downloaded at http://www.mass.gov/dep/air/approvals/reshome.htm . These records shall be maintained on site for a minimum of five (5) years and shall be made available to MassDEP personnel upon request.
EU5, EU7, EU17	5) Maintain a record of the dates that the Aerosol Filling Room Leak Detection and Repair Program (AFRLDRP) are conducted to verify that it is being conducted at least semiannually. [Approval MBR-92-IND-053, Proviso No. I.8] 6) Maintain a record of attendance lists of the required semi-annual Gas Room Operator (GRO) Training (formerly known as Hydrocarbon Safety Training). [Approval MBR-92-IND-053, Proviso No. I. 20]

Table 4	
EU#	RECORD KEEPING REQUIREMENTS
EU5, EU7, EU17	7) Maintain a record of gas room safety venting. Specifically, the gas room operator's initials, date, time, reason, location, and approximate amount of VOC that is vented must be documented. Actively used records must be kept by each filling room, and accumulated records must be stored in the RACT Compliance Files for at least five (5) years and made available for DEP and EPA review. [Approval MBR-92-IND-053, Proviso No. I. 10]
EU12	8) Result reports from the semi-annual inspection of all components of the Tank Farm and outdoor piping and all repair records as a result of the Tank Farm Leak Detection and Repair program must be maintained in the RACT Compliance Files for at least five (5) years and must be made available for DEP and EPA inspection. [Approval MBR-92-IND-053, Proviso No. I.9] 9) Maintain a record of Tank Farm operator training. [Approval MBR-92-IND-053,
	Proviso No. I. 20] 10) The Tank Farm operator must record information about each tank truck delivery, including the date, propellant type and the operator's initials. These records must be kept in the RACT Compliance Files for at least five (5) years and must be made available for DEP and EPA inspection. [Approval MBR-92-IND-053, Proviso No. I. 13]
EU13,EU14 EU23, EU24	11) Maintain a record of fuel consumption for these emission units on a monthly and twelve month rolling period (current month plus the sum of the previous eleven months). Said records shall also include the sulfur content of the fuel oil used and a calculation of the resulting emissions from said usage.
EU1, EU3, EU13, EU14, EU23, EU24	12) Maintain on file fuel purchase receipts for each unit.
EU17	13) A record keeping system shall continue to be kept on-site. All records shall be maintained up-to-date such that year-to-date information is readily available for MassDEP examination. Recordkeeping shall, at a minimum, include:
	 Maintenance. A record of routine maintenance activities including, at a minimum, a description of the maintenance performed and the date and time th work was completed.
	b) Malfunctions. A record of all malfunctions including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the facility returned to compliance.
	c) Records shall be maintained documenting the air contaminant emission analysi supporting the response to BWP AQ 01-B Section-C.
	d) All records shall be kept on site for five (5) years from date of record and shall be made available to the MassDEP upon request.

	Table 4	
EU#	RECORD KEEPING REQUIREMENTS	
Facility-Wide	14) Maintain a record of facility-wide VOC, HAP, SO ₂ , CO, and NO _x emissions on a monthly and 12 month rolling period so that compliance with the emission limits in Table 2 of this Plan Approval shall be documented. 15) Maintain a record of any exceedance of any limitation/restriction established in Table 2 of this Plan Approval. 16) Maintain dedicated RACT Compliance Files, in order to determine compliance. All files must display the date of initial filing. All files must be maintained for a period of at least five (5) years after the initial date of filing. The files must be made available to MassDEP and EPA personnel for inspection. The Permittee may modify and/or improve the current record keeping forms without notification, provided that all of the information in the current record keeping forms necessary to determine compliance is still available. [Approval MBR-92-IND-053, Proviso No. I.1]	
	17) Copies of any TTV (through the valve) technical feasibility evaluation results for new aerosol packaged product must be maintained in the RACT Compliance Files for at least five (5) years and must be made available for MassDEP and EPA review. [Approval MBR-92-IND-053, Proviso No. I. 3]	
	18) A record of the evaluation of TTV adapters for any new shave cream products (non-gel) must be maintained in the files for a period of at least five (5) years and made available for MassDEP and EPA inspection. [Approval MBR-92-IND-053, Proviso No. I. 12]	
	19) Maintain records of alcohol usage in the RACT Compliance Files for at least five (5) years and make them available for MassDEP and EPA inspection. [Approval MBR-92-IND-053, Proviso No. I.15]	
	20) The results of the required inspection, maintenance, and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near each fuel utilization facility having an energy input capacity of ≥ 3 MMBtu/hr, as provided in 310 CMR 7.04(4)(a) incorporated herein by reference. Said records shall be maintained on site for a period of the five (5) most recent years.	
	21) Maintain fuel purchase records in order to demonstrate compliance with fuel sulfur content requirements as provided in 310 CMR 7.05(1) incorporated herein by reference. Said records shall be maintained on site for a period of the five (5) most recent years.	
	22) Maintain records of facility operations such that information may be reported as required for compliance with 310 CMR 7.71 (Greenhouse Gas Reporting Requirements). Copies of documents and other information supplied to the Department, the registry, or an approved verification body to comply with 310 CMR 7.71(5) and (7) shall be retained at the facility for (5) five years from the date of submittal.	

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Table 4	
EU#	RECORD KEEPING REQUIREMENTS
Facility-Wide	 23) The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping. 24) The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site. 26) The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	 27) The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation. 28) The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration. 29) The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years. 30) The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4 Key:

EU# = Emission Unit Number

SOMP = Standard Operating and Maintenance Procedure

CMR = Code of Massachusetts Regulations

CFR = Code of Federal Regulations

RICE = reciprocating internal combustion engine

VOC = Volatile Organic Compounds

PM = Total Particulate Matter

HAP = Hazardous Air Pollutants

 CO_2 = Carbon Dioxide

PCD = Pollution Control Device

USEPA = United States Environmental Protection

Agency

 NO_x = Nitrogen Oxides

 $SO_2 = Sulfur Dioxide$

Table 5	
EU#	REPORTING REQUIREMENTS
Facility-Wide	1) In accordance with 310 CMR 7.71(5), by April 15 th of each year, report emissions of greenhouse gases from stationary emissions sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions; and owned or leased motor vehicles. Report greenhouse gas emissions electronically in a format that can be accommodated by the registry. (only if reporting thresholds are triggered)
	2) In accordance with 310 CMR 7.71(6), certify greenhouse gas emissions reports using a form provided by MassDEP or the registry. (only if reporting thresholds are triggered)
	3) Submit to MassDEP the test results reports for any required stack testing as provided in 310 CMR 7.13(1)(d) incorporated herein by reference.
	4) The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	5) The Permittee shall notify the Northeast Regional Office of MassDEP, BAW Permit Chief by telephone: 978-694-3200, email: NERO.Air@massmail.state.ma.us, or fax: 978-694-3499, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to Permit Chief at MassDEP within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	6) The Permittee shall report every three years or as otherwise required by MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.

Table 5 Key:

EU# = Emission Unit Number SOMP = Standard Operating and Maintenance Procedure CMR = Code of Massachusetts Regulations

CFR = Code of Federal Regulations

PCD = Pollution Control Device USEPA = United States Environmental Protection Agency

4. SPECIAL TERMS AND CONDITIONS

A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU#	SPECIAL TERMS AND CONDITIONS
EU5, EU7, EU17	1) The Permittee must continue its present gas room safety venting practice of venting only for reasons of maintenance, emergencies and/or long-term shutdowns (i.e., anticipated 7 days out of use). [Approval MBR-92-IND-053, Proviso No. I.10] 2) The Permittee must conduct semi-annual Gas Room Operator (GRO) Training (formerly known as Hydrocarbon Safety Training) for gas room mechanics, as referenced in [Approval MBR-92-IND-053, Proviso I.20]
EU5, EU7	3) The Permittee must continue to use the seal-less booster pumps. [Approval MBR-92-IND-053, Proviso No. I.6]
EU12	4) Tank truck hatches in the Tank Farm must be closed at all times except during loading or unloading. [Approval MBR-92-IND-053, Proviso No. I.14] 5) Continue to use the comprehensive Tank Farm Leak Detection and Repair Program (TFLDRP) which includes propellant fugitive emission sources. All components of the Tank Farm and outdoor piping must be inspected semi-annually. [Approval MBR-92-IND-053, Proviso No. I.9] 6) Train new Tank Farm operators using the Propellant Tank Farm Emission Minimization Program within the first week of a new Tank Farm operator's hiring/transfer, whenever a new person is assigned to the Tank Farm for a period of longer than one month. [Approval MBR-92-IND-053, Proviso I.20]
Facility-wide	7) The Permittee must continue to use TTV (Through the Valve) adapters for all of its current shave cream (non-gel) products. For any new shave cream (non-gel) products, TTV adapters must be evaluated for technical feasibility, and used if technically feasible. 8) The Permittee must minimize the use of ethanol for non-production use (labs & parts cleaning) and must continue to track its alcohol usage on a monthly basis. These records will be kept in the RACT Compliance Files for at least five (5) years and be made available for MassDEP and EPA inspection. [Approval MBR-92-IND-053, Proviso No. I.15] 9) The Permittee shall continue to utilize pollution prevention techniques, such as TTV filling, whenever feasible to minimize VOC losses. [Approval MBR-92-IND-053, Proviso No. I.3]

	Table 6
EU#	SPECIAL TERMS AND CONDITIONS
	10) Should a new type of propellant be chosen or a concentrate solvent substitute for ethanol be chosen other than those listed below, the Permittee must evaluate the effects of the change and notify the MassDEP and EPA in writing of the substitution, the effect on emissions and other effects of the proposed change prior to making the change. The Permittee shall maintain records on these reformulations changes that require MassDEP and EPA notification, and shall keep the records in its RACT Compliance Files for at least five (5) years. Propellants and concentrates considered acceptable to substitute or use without notification include: Acceptable materials for normal production of aerosol-packaged products:
	Acceptable propellants:
Facility-wide	a. propane b. normal butane c. pentane d. isopentane (as a propellant; isopentane is now used as a "blowing agent") e. dimethyl ether f. propellant HFC-152A g. isobutane h. combinations of any of the above propellants Acceptable solvents:
	a. any type of ethanol for production Acceptable material for normal production and ancillary operation: The Permittee may use the following materials without
	prior MassDEP and EPA approval provided that facility continues to use pollution prevention techniques to minimize emissions, and maintains emission records:
	 a. any solvents or materials in the laboratories; and b. any cleaning solvents associated with ancillary operations.

Table 6	
EU#	SPECIAL TERMS AND CONDITIONS
EU# Facility-wide	SPECIAL TERMS AND CONDITIONS 11) The Permittee must comply with 310 CMR 7.18(1)(c) which requires that VOC be stored and disposed of "in a manner which will minimize evaporation to the atmosphere. Proper storage shall be in a container with a tight fitting cover. Proper disposal shall include incineration in an incinerator approved by the Department, transfer to another person licensed by the Department to handle VOC, or any other equivalent method approved by the Department." 12) All VOC or HAPs containing materials, such as solvents and clean-up solutions, shall be transported and stored in tightly covered containers. 13) All cleaning rags used in conjunction with the cleaning solutions shall be placed in tightly covered containers when not in use, and shall be collected for proper recycling or disposal. 14) The Permittee is subject to the requirements of 42 U.S.C. 7401, § 112(r) Accidental Release Prevention Requirements: Risk Management under Clean Air Act 112(r)(7), and has submitted to the "regulating authority" the facility's contingency plan for responding to accidental releases of regulated substances. 15) The Permittee is subject to the requirements of 40 CFR 82: Protection of Stratospheric Ozone and the United States Environmental Protection Agency enforces these requirements. 16) The Permittee is subject to the requirements of 40 CFR Part 59, Subpart C and the United States Environmental Protection Agency enforces these requirements.
	Controls for Consumer and Commercial Product. 18) This Plan Approval (NE-15-009 & Transmittal No. X267394) shall supersede in their entirety the following plan approvals, with the exception that all plan application materials shall become part of this Plan Approval: a) Conditional Approval No. MBR-09-IND-011 dated October 19, 2009; b) Final Approval No. MBR-06-IND-004 dated October 22, 2008;
	 c) Final Approval No. MBR-06-IND-007 dated May 22, 2006; d) Final Approval No. MBR-96-IND-045 dated May 2, 2001; and e) Emission Control Plan Final Approval No. MBR-92-IND-023 dated June 17, 1999.

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Table 6 Key:

EU# = Emission Unit Number VOC = volatile organic compounds CMR = Code of Massachusetts Regulations CFR = Code of Federal Regulations

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.

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- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. <u>APPEAL PROCESS</u>

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

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This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Mr. Mun Wong by telephone at 978-694-3286, or in writing at the letterhead address.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Mun S. Wong **Environmental Engineer**

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Susan P. Ruch **Acting Permit Chief** and Deputy Regional Director Bureau of Air and Waste

cc: Board of Health, 36 Bartlet Street, Andover, MA 01810

Fire Department, 32 North Main Street, Andover, MA 01810

John M. Foley, 26 Florentine Gardens, Springfield, MA 01108

ecc: MassDEP/Boston – Y. Tian

MassDEP/NERO - E. Braczyk, M. Bolis (hard copy), M. Persky (hard copy)